BRUHAT BENGALURU MAHANAGARA PALIKE

Name of work: Improvements to drains and Providing Asphalting to roads at Bhuvaneshwari Nagara 9th and 10th Main Surroundings in Ward No.14 Bagalagunte

Job Code:- 014-21-000009

Estimated Cost: 99.70 Lakhs

Sl No	Description of Items	No	Length (m)	Width (m)	Depth (m)	Quantity	Unit	Rate	Amount
1	KSRRB 300-3. **Earthwork excavation by manual means** for roads, drains & similar works in ordinary soil invoiving , excavated surface leveled & sides neatly dressed , the disposed earth to be levelled neatly after breaking of clods complete as per specification MORTH/ Chapter 3. **(Page No. 142/ Item No. 19.1/ PWD SR 2018-19)**								
	Bhuvaneshwari Nagara								
	For RCC Drain								
	3rd Cross	1	30.00	1.10	1.00	33.00			
		1	60.00	1.10	1.00	66.00			
	2nd cross (LHS) FROM 8th Main	2	190.00	1.10	1.00	418.00			
	4th cross	2	254.00	1.10	1.00	558.80			
	For Asphalt Road								
	2nd cross (LHS) FROM 8th Main	2	190.00	1.00	0.20	76.00			
	2nd cross (RHS) FROM 8th Main	2	90.00	1.00	0.20	36.00			
	4th cross	2	254.00	1.00	0.20	101.60			
						1289.40	**Cum**	**137.80**	**177679.32**
	Basic Rate	130.00							
	Area Weightage 6%	7.80							
	Data Rate	**137.80**							
2	KSRRB M2100-10. Providing and laying **Plain cement concrete of mix 1:3:6** with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. **(P.No-222,I No-27.18 PWD SR 2018-19)**								
	Bhuvaneshwari Nagara								
	For RCC Drain								
	3rd Cross	1	30.00	1.10	0.15	4.95			
		1	60.00	1.10	0.15	9.90			
	2nd cross (LHS) FROM 8th Main	2	190.00	1.10	0.15	62.70			
	4th cross	2	254.00	1.10	0.15	83.82			
						161.37	**Cum**	**5680.59**	**916676.61**
	Basic Rate	5115.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-1079.39	Note:- (220*490.63/100)=1079.39						
	Add Cement cost as per Issue rate	1323.43	Note:- (220*300.78/50)=1323.43						
	Sub Total	**5359.05**							
	Area Weightage 6%	321.54							
	Grand Total	**5680.59**							
3	Providing and laying plain/reinforced cement concrete for side drains **using M20 nominal mix** concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specificationsdo- Wall & bottom thickness 15cm **(I No-37.59.2,P No-271 PWD SR 2018-19)**								
	Bhuvaneshwari Nagara								
	For RCC Drain								
	For Bottom Raft								
	3rd Cross	1	30.00	0.90	0.15	4.05			
		1	60.00	0.90	0.15	8.10			
	2nd cross (LHS) FROM 8th Main	2	190.00	0.90	0.15	51.30			
	4th cross	2	254.00	0.90	0.15	68.58			
	For RCC Wall								
	3rd Cross	2	30.00	0.15	0.60	5.40			

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Sl No	Description of Items	No	Length (m)	Width (m)	Depth (m)	Quantity	Unit	Rate	Amount
	2nd cross (LHS) FROM 8th Main	2	63.00	0.15	0.75	14.18			
	4th cross	4	190.00	0.15	0.60	68.40			
		4	254.00	0.15	0.75	114.30			
						334.31	**Cum**	**7422.96**	**2481531.77**
	Basic Rate	6670.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-1471.89	Note:- (300*490.63/100)= -1471.89						
	Add Cement cost as per Issue rate	1804.68	Note:- (300*300.78/50)=1804.68						
	Sub Total	**7002.79**							
	Area Weightage 6%	420.17							
	Grand Total	**7422.96**							
4	KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C workincluding straightening, cutting, bending, hooking, placing in position,lapping and / or welding wherever required, tying with binding wire andanchoring to the adjoining members wherever necessary complete asper design (laps, hooks and wastage shall not be measured and paid)cost of materials, labour, HOM of machinery complete as perspecifications.Specification No. KBS 4.6.3 **TMT Bars Fe-500 (I No-28.8.2,P No-229 PWD SR 2018-19)**								
	Consider 65kg/Cum for RCC drain	1	334.31	65.00		21729.83			
						21.73	**Tonne**	**71183.24**	**1546799.35**
	Issued rate	67154.00							
	Area Weightage 6%	4029.24							
	Data Rate	**71183.24**							
5	Providing and fixing Precast RCC cover slabs of 100 mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement and pointing for joints 1:3 cement mortor including form work, lift charges,curing and concrtee finished surface on both sides etc,and complete as per the directions of Enginner in charges.**(Data Rate)**								
	Bhuvaneshwari Nagara								
	For RCC Drain								
	3rd Cross	1	30.00	0.90		27.00			
		1	60.00	0.90		54.00			
	2nd cross (LHS) FROM 8th Main	2	190.00	0.90		342.00			
	4th cross	2	254.00	0.90		457.20			
						880.20	**Sqm**	**1867.00**	**1643333.40**
	Data Rate	**1867.00**							
6	KSRRB 300-Compaction KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications. MORTH / Chapter 3 **(Page No-147 Item no - 19.64 of KPWD SR 2018-19)**								
	Bhuvaneshwari Nagara								
	For Asphalt Road								
	2nd cross (LHS) FROM 8th Main	2	190.00	1.00		380.00			
	2nd cross (RHS) FROM 8th Main	2	90.00	1.00		180.00			
	4th cross	2	254.00	1.00		508.00			
						1068.00	**Sqm**	**6.36**	**6792.48**
	Basic Rate	6.00							
	Area Weightage 6%	0.36							
	Data Rate	**6.36**							
7	KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap I basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve thedesired density complete as per specifications. MORTH Specification No. 406 **(Page No-158 Item no - 20.18 of KPWD SR 2018-19)**								
	Bhuvaneshwari Nagara								
	For Asphalt Road								
	2nd cross (LHS) FROM 8th Main	2	190.00	1.00	0.20	76.00			
	2nd cross (RHS) FROM 8th Main	2	90.00	1.00	0.20	36.00			
	4th cross	2	254.00	1.00	0.20	101.60			

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Sl No	Description of Items	No	Length (m)	Width (m)	Depth (m)	Quantity	Unit	Rate	Amount
						213.60	Cum	2001.28	427473.41
	Basic Rate	1888.00							
	Area Weightage 6%	113.28							
	Data Rate	**2001.28**							
8	KSRRB M500-6. Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.60 kg I sqm using mechanical means complete as per specifications.MORTH Specification No. 502 **(Page No-161 Item no - 21.6 of KPWD SR 2018-19)**								
	Bhuvaneshwari Nagara								
	For Asphalt Road								
	2nd cross (LHS) FROM 8th Main	2	190.00	1.00		380.00			
	2nd cross (RHS) FROM 8th Main	2	90.00	1.00		180.00			
	4th cross	2	254.00	1.00		508.00			
						1068.00	**Sqm**	**33.92**	**36226.56**
	As per Issue rate	32.00							
	Area Weightage 6%	1.92							
	Grand Total	**33.92**							
9	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen **(Page No-160 Item no - 21.17.6 of KPWD SR 2018-19)**								
	Bhuvaneshwari Nagara								
	For Asphalt Road								
	2nd cross (LHS) FROM 8th Main	2	190.00	1.00	0.05	19.00			
	2nd cross (RHS) FROM 8th Main	2	90.00	1.00	0.05	9.00			
	4th cross	2	254.00	1.00	0.05	25.40			
						53.40	**Cum**	**7292.80**	**389435.52**
	As per Issue rate	6880.00							
	Area Weightage 6%	412.80							
	Grand Total	**7292.80**							
10	KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause 501 **(Page No-161 Item no - 21.2 of KPWD SR 2018-19)**								
	Bhuvaneshwari Nagara								
	For Asphalt Road								
	2nd cross (LHS) FROM 8th Main	1	190.00	4.10		779.00			
	2nd cross (RHS) FROM 8th Main	1	90.00	4.70		423.00			
	4th cross	1	254.00	4.70		1193.80			
						2395.80	**Sqm**	**5.30**	**12697.74**
	Basic Rate	5.00							
	Area Weightage 6%	0.30							
	Grand Total	**5.30**							
11	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VGIO) on the prepared black topped surfaces at 2.5 kg per 10sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH **(Page No-161 Item no - 21.7 of KPWD SR 2018-19)**								
	Bhuvaneshwari Nagara								
	For Asphalt Road								
	2nd cross (LHS) FROM 8th Main	1	190.00	4.10		779.00			
	2nd cross (RHS) FROM 8th Main	1	90.00	4.70		423.00			
	4th cross	1	254.00	4.70		1193.80			
						2395.80	**Sqm**	**12.72**	**30474.58**
	As per Issue rate	12.00							
	Area Weightage 6%	0.72							
	Grand Total	**12.72**							

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Sl No	Description of Items	No	Length (m)	Width (m)	Depth (m)	Quantity	Unit	Rate	Amount
12	Providing and laying bituminous concrete 40mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction in all respects complete as per specifications. Clause 507 of MORTH V revision as per IRC SP-53-2015. using – do – using 40-60 TPH capacity HMP with mechanical paver grading II (30-45mm) with 5.4 % of modified bituminus binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (waste plastic) **(P.No.171, I.No.21.78.12 of PWD BCSR 2018-19)**								
	Bhuvaneshwari Nagara								
	For Asphalt Road								
	2nd cross (LHS) FROM 8th Main	1	190.00	4.10	0.04	31.16			
	2nd cross (RHS) FROM 8th Main	1	90.00	4.70	0.04	16.92			
	4th cross	1	254.00	4.70	0.04	47.75			
						95.83	**Cum**	**8544.66**	**818851.86**
	As per Issue rate	8061.00							
	Area Weightage 6%	483.66							
	Grand Total	**8544.66**							
13	KSRRB M100-1 Loading and Unloading of Stone Boulder / Stone aggregates /Sand/ Kanker / Moorum. KSRRB M100-1 : Placing tipper at loading point, loading with front end loader,dumping, turning for return trip, excluding time for haulage and return trip complete as per specifications. MORTH -100/ Chapter 1 **(P.No.136 & I.No.17.1 PWD 18-19)**								
	Vide Item No.1					**1289.40**	**Cum**	**57.00**	**73495.80**
	Basic Rate	**57.00**							
14	KSRRB M100-4.1. Cost of Haulage Excluding Loading and Unloading MORTH -100/ Chapter 1 Case-I : Surface Road **(P.No.136 & I.No.17.4 PWD 18-19)**								
	Vide Item No.14					**1289.40**	**t.km**	**25.60**	**33008.64**
	lead for earth 10 km(2*1.28*10=25.60)	**25.60**							
								Total Construction Cost	**8594477.03**
								GST Charges 12%	**1031337.24**
								Tender Premium 4%	**343779.08**
								Sub Total	**9969593.36**
								Utility Shifting, Miscellaneous and Rounding off	**3406.64**
								GRAND TOTAL	**9970000.00**
	Rupees Ninety Nine Lakh(s) Seventy Thousand Only								

Certificate

1) This Work Comes Within BBMP Limits.
2) Certified that personaly Inspected the Work Spot.
3) Certified that the Estimate is Prepared Based on CSR of PWD Bangalore Circle 2018-19 & issued rate Dated From 01/01/2021
4) Estimate is Prepared Making Use of essential itemof work as per site conditions in safest way of Execution in most economical way
5) This work is not include in any other program of work.

Assistant Engineer
Ward No.14

Asst. Executive Engineer
T Dasarahalli Sub division

Executive Engineer
Dasarahalli Division

ADMINISTRATIVELY SANCTIONED FOR
(Rupees Ninety nine lakh seventy thousand only
Under the Head of Account P-3702 Spend Development works
Registered as no EE(D.D.)/AS. 194/2021 Subject
to conditions contained in Enclosed Memo
No. EE(D.D)/AS/194/2021 Dt. 02.03.21

Exe. Engr
(DASARAHALLI) BBMP

AE/AE.

Technically Sanctione for Rs.....
Rs In words
Under
Job Code No
Registered as CE No / Subject
to conditions contained in Enclosed Memo
No / Dt

Executive Engineer

AE/JE

PTO

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Technically Sanctioned For Rs: 99.70 Lakhs

Rs. In Words Ninety Nine Lakh Seventy Thousand only

Under P-3702

Job Code No. 014-21-000009

Registered as SE No. 121 / 21-22 subject to conditions contained in Enclosed Memo No. SE/DR/TS/121/21-22 Dt. 22.06.21

AE / JE TA

SE(D) 24 Pgs